

Date: Wednesday, 3/26/2008 9:53:53 AM
User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : BEARPAW KIT (19"X24")
Job Number : 38171
Estimate Number : 10323
P.O. Number :
This Issue : 3/26/2008 S.O. No. :
Prsht Rev. : NC Part Number : D206559013
First Issue : / / Type : MACHINED PARTS Drawing Number : D2432 REV F3
Previous Run : 37603 Drawing Revision : F3
Material :
Due Date : 4/10/2008 Qty: 6 Um: Each
Written By :
Checked & Approved By : JD 08.3.27
Comment : Est Rev:J 04.02.17 Blank size changed KJ/JLM
Est Rev:K 07-01-02 Was K10008 JLM
Est Rev:L 08-01-09 Added Step 2 JLM Verified
By:EC

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 DC DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels per PPP D206-559-013 CHG005

08/04/29 08/4/29 JLD

2.0 MFG ENGINEERING MFG ENGINEERING



Comment: MFG ENGINEERING

Program Batch Number

08-01-16

3.0 MUHMWB10 UHMW 1" Black



Comment: Qty.: 6.9878 sf(s)/Unit Total : 41.9265 sf(s)

blank: 19.500" x 24.00" x 1.00" thick (+0.030/-0.000) per DSK086-5

Material: Black UHMW 1"

(MUHMWB10)

Batch: M107067 (6X) 19x24 x1

M105863 (6X) 19x24 x1

M.A/E 08/04/26

4.0 HAAS1 HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1

Note:(2) bearpaws for (1) Kit

1-Inspect material for defects or damage prior to machining

2-Machine as per Folio and Dwg D2432 Identify as D2432F

3-Deburr

M.A/E 08/04/27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D206-559-013 PAR #: N/A Fault Category: Prod / Machine ^{PMS} NCR: Yes No DQA: D Date: 08/04/30
 QA: N/C Closed: D Date: 08/04/30

NCR: 38171		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08/04/23	4.0	The clamps were not tight enough 1 x 19½ x 24 x 1 (scrap) operator error	 08.04.28 Per 051042	Scrap and Destroy and Repl/tee. B# <u>105863</u>	J.A. 08/04/28	 08/04/28	 08.04.28 Per 051042	 08/04/28

NOTE: Date & initial all entries

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Seq. #:

Machine Or Operation:

Description :

5.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

B.A. 09/04/27

6.0

QC8

SECOND CHECK



Comment: SECOND CHECK

7/28 08/04/28

7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

8.0

D2182B

Neoprene Cushion-.750 bl



Comment: Qty: 2.5000 f(s)/Unit Total: 15.0000 f(s)

Pick: Packing Kit

Qty Part Number Description Batch

6 D2182B050 Rubber Cushion

35769

SP

9.0

D2274

Radius Block



Comment: Qty.: 12.0000 Each(s)/Unit Total: 72.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

12 D2274 Radius Block

2 D2432F(ref only) Bearpaw

37630

SP

10.0

D2438

Clamp



Comment: Qty.: 6.0000 Each(s)/Unit Total: 36.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

6 D2438 Clamp

37562

SP

11.0

D2529

Washer



Comment: Qty.: 12.0000 Each(s)/Unit Total: 72.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

137210

8/4/29

SP

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Part Number: D206559013

Job Number:



Seq. #:

Machine Or Operation:

Description :

12 D2529

Washer _____

12.0

D2732

Rubber Extrusion



Comment: Qty.: 10.4160 f(s)/Unit Total : 62.4960 f(s)

Pick: Packing Kit

Qty Part Number Description Batch

6 D2732-050 Rubber Cushion 37632

13.0

AN415A

Bolt



Comment: Qty.: 12.0000 Each(s)/Unit Total : 72.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

12 AN4-15A Bolt 107321

14.0

AN417A

Bolt



Comment: Qty.: 12.0000 Each(s)/Unit Total : 72.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

12 AN4-17A Bolt 105653

15.0

AN960JD416

Washer



Comment: Qty.: 24.0000 Each(s)/Unit Total : 144.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

24 AN960JD416 Washer 107321

16.0

MS21042L4

Nut



Comment: Qty.: 12.0000 Each(s)/Unit Total : 72.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

12 MS21042L4 Nut (or -4) 106051

8/4/28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Job Number:



Seq. #:

Machine Or Operation:

Description :

17.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

5/08/09 EC

18.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPPD206-559-013

Location: A

8/4/09

JCP

19.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/04/30 J

Job Completion



MF 08-04-30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 38171
Description: Bearpaw		Part Number: D2432
Inspection Dwg: D2432	Rev: F3	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Inspection Sheet Drawing Dimension		Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
A	0.063 x 45°	+0.030/-0.010	0.054 x 45°				
B	5.500	+/-0.030	5.500				
C	0.200	+/-0.030	0.198				
D	0.25 x 45°	+/-0.030	0.250 x 45°				
E	R0.250	+/-0.030	R0.250				
F	0.250	+/-0.010	0.247				
G	0.625	+/-0.030	0.619				
H	0.375	+/-0.010	0.377				
I	0.950	+0.030/0.010	0.944				
J	19.000	+/-0.030	19.000			tape	
K	3.14	+/-0.030	3.122				
L	3.28	+/-0.030	3.293				
M	Ø0.260	+0.005/-0.000	Ø0.260				
N	Ø0.93	+/-0.030	Ø0.930				
O	0.30	+0.030/-0.000	0.296				
P	23.750	+/-0.030	23.750			tape	
Q	7.375	+/-0.030	7.372				
R	4.250	+/-0.010	4.253				
S	2.000	+/-0.030	2.003				
T	9.000	+/-0.010	8.998				
U	9.000	+/-0.010	8.998				
V	0.375	+/-0.010	0.375				

Measured by: M.A. [Signature]	Audited by: [Signature]	Prototype Approval:	N/A
Date: 08/04/27	Date: 08/04/27	Date:	

Rev	Date	Change	Revised by	Approved
A	04.01.09	New Issue P/O K10008/D206-559-015	KJ/RF [Signature]	[Signature]



RELEASED
98.06.17 KE

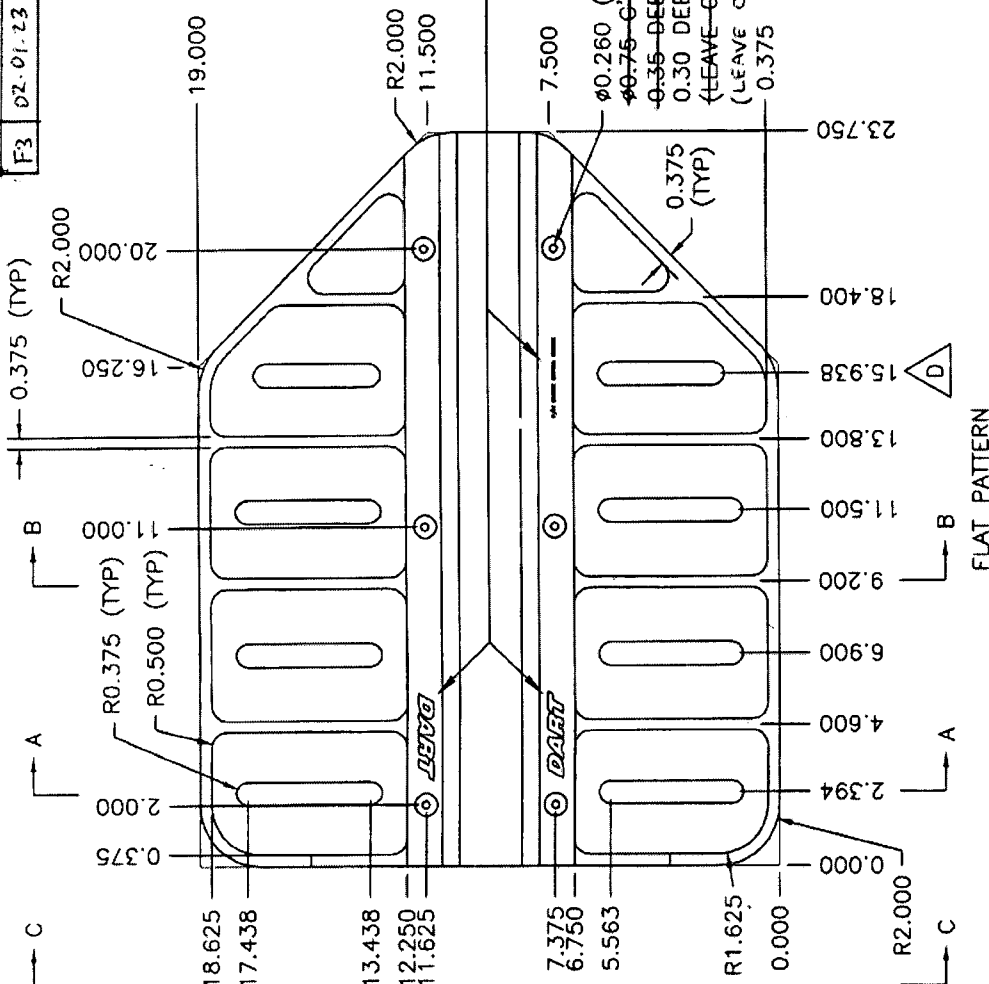
DESIGN KE	DRAWN BY KE	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED MAY	APPROVED [Signature]	DRAWING NO. D2432	REV. F SHEET 1 OF 2
DATE 98.05.12	TITLE BEARPAW	SCALE 1:6	
A	95.10.31	NEW ISSUE	
B	96.01.24	RE-DESIGN	
C	96.03.26	CHANGE BORE AND C'BORE DEPTH	
D	96.06.04	MOVE SLOT	
E	97.02.27	CHANGE C'BORE DEPTH, BORE RADIUS	
F	98.05.12	CHANGE C'BORE, ADD B AND F P/N	

F1	99.03.03	ADD DEO 9143
F2	01.03.28	Q0.93 WAS 0.75
F3	02.01.23	CLARIFY BORE DIMS & RF

ENGRAVE LOGO TO MAX
DEPTH OF 0.012. ENGRAVE
PART AND BATCH NUMBERS
TO MAX DEPTH OF 0.010.
(TYPICAL LOCATION AS
ILLUSTRATED)

EFFECTIVE DEOs

9143	



BEND AFTER MACHINING
(D2432B ONLY)

D2432F: FLAT BEARPAW
D2432B: BENT BEARPAW

SHOP COPY
RETURN TO
ENGINEERING

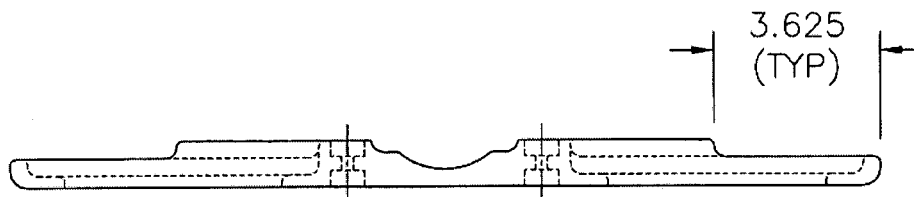
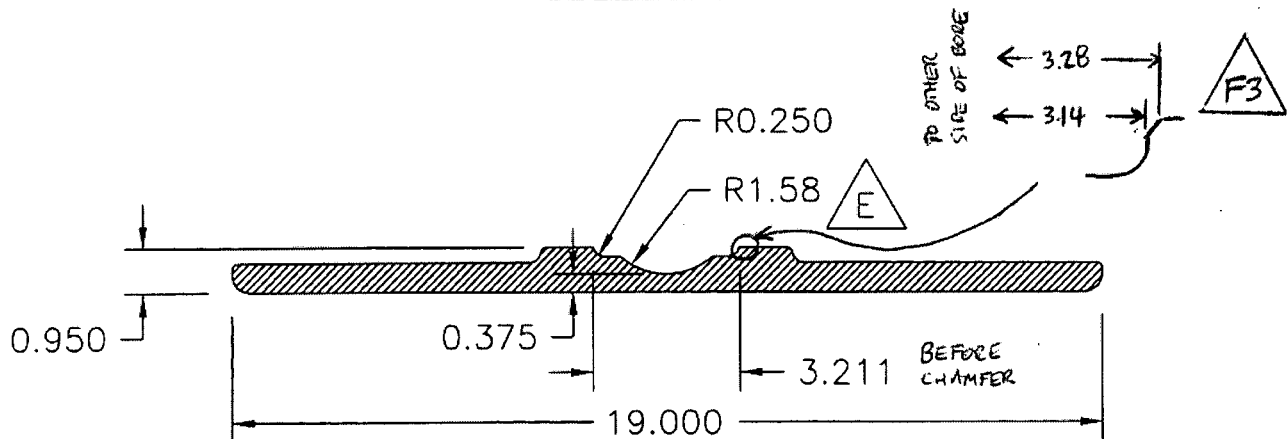
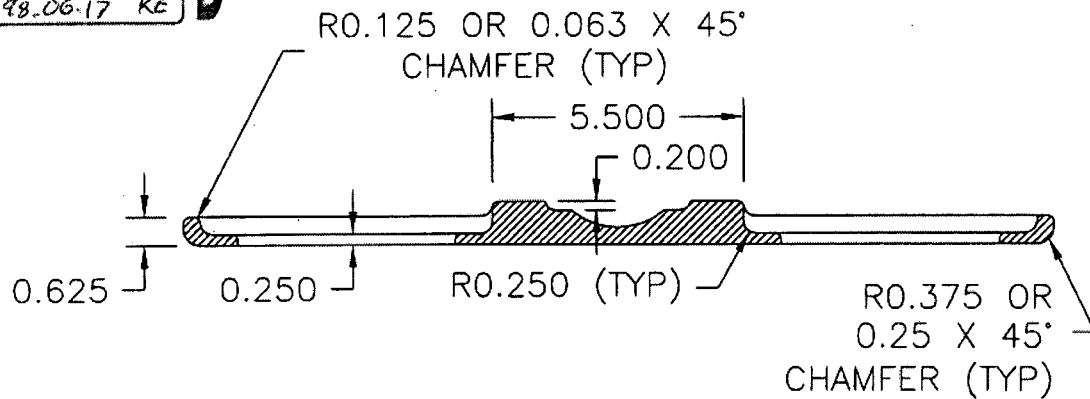
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE

MATERIAL: UHMW BLACK PER SPEC CONTROL DRAWING D2689
1.00 THICK (MACHINE TO 0.950)



DESIGN KE	DRAWN BY KE	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D2432	REV. F SHEET 2 OF 2
DATE 98.05.12		TITLE BEARPAW	SCALE 1:4

RELEASED
98.06.17 KE



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WORK ORDER
NO. 38171